

Montana Board of Oil and Gas Conservation Environmental Assessment

Operator: KeeSun Corporation
Well Name/Number: Ralph Botham 14C-13
Location: SE SW Section 13 T34N R3W
County: Toole, MT; Field (or Wildcat) Kevin-Sunburst

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill to 1600' TD, in the Madison Formation.

Possible H₂S gas production: Slight H₂S gas in the Madison Formation.

In/near Class I air quality area: No, Class I air quality area nearby.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☒ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No special concerns – using small rig to drill to 1600' TD. If there are existing pipeline for gas in the area then gas must be tied into system or if no gas gathering system nearby or a small quantity of associated gas, gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.

High water table: No high water table anticipated in the area of review.

Surface drainage leads to live water: No surface drainages in the area of review. There are only some pothole alkali ponds.

Water well contamination: No, closest domestic water well is about 3/8 of a mile to the southwest from this location. Depth of water well is 35'. Surface casing will be set and cemented from 500', well below the depth of this water well.

Porous/permeable soils: Somewhat porous, sandy bentonite soils

Class I stream drainage: No Class I stream drainages in the area of review.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

___ Other: _____

Comments: 500' of surface casing cemented to surface adequate to protect freshwater zones. Also, air/air mist and/or fresh water mud systems to be used. No concerns.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings.

High erosion potential: No, moderate cut, up to 7.5' and moderate fill, up to 2.4', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 200'X200' location size required.

Damage to improvements: Slight, cultivated land, CRP.

Conflict with existing land use/values: Slight

Mitigation

___ Avoid improvements (topographic tolerance)

___ Exception location requested

X Stockpile topsoil

___ Stream Crossing Permit (other agency review)

X Reclaim unused part of wellsite if productive

___ Special construction methods to enhance reclamation

___ Other _____

Comments: Access will be over existing county roads and existing lease road. About 1100' of new access will be built into this location from the existing lease road. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is 1.25 miles to the northeast and 1.5 miles to the north northwest from this location.

Possibility of H2S: Slight amount of H2S possible from the Madison Formation.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time

Mitigation:

X Proper BOP equipment

___ Topographic sound barriers

___ H2S contingency and/or evacuation plan

___ Special equipment/procedures requirements

___ Other: _____

Comments: Adequate surface casing cemented to surface (500') and operational BOP should mitigate any concerns. No concern.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: No identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Species identified as threatened by the USFWS is the Black-footed Ferret. Species listed as candidate specie is the Sprague's Pipit. NH tracker website for this Township and Range lists zero (0) species of concern.

Mitigation:

☐ Avoidance (topographic tolerance/exception)

☐ Other agency review (DFWP, federal agencies, DSL)

☐ Screening/fencing of pits, drillsite

☐ Other: _____

Comments: Private surface cultivated land (CRP). There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

☐ avoidance (topographic tolerance, location exception)

☐ other agency review (SHPO, DSL, federal agencies)

☐ Other: _____

Comments: Private surface cultivated land (CRP).. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

Social/Economic

(possible concerns)

☐ Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns. Well is a development oil well in the Kevin-Sunburst Oil & Gas Field and existing oil and gas field since the 1920's.

Remarks or Special Concerns for this site

Well is a 1600' Madison Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): \s\Steven Sasaki
(title:) Chief Field Inspector
Date: March 22, 2012

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells.

(subject discussed)

March 22, 2012

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Toole County

(subject discussed)

March 22, 2012

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T34N R3W

(subject discussed)

March 22, 2012

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____